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27498	7590 08/22/2006		EXAMINER	
PILLSBUR P.O. BOX 10	Y WINTHROP SHAW	LY, ANH		
	AN, VA 22102		ART UNIT	PAPER NUMBER
,			2162	<u></u>

DATE MAILED: 08/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)		
Office Action Summary			KIM ET AL.		
		09/757,435 Examiner	Art Unit		
<b>.</b>			2162		
The MAILING DATE of this co	mmunication appe	Anh Ly ears on the cover sheet with the c			
Period for Reply			·		
A SHORTENED STATUTORY PER WHICHEVER IS LONGER, FROM  - Extensions of time may be available under the p after SIX (6) MONTHS from the mailing date of 1. If NO period for reply is specified above, the ma  - Failure to reply within the set or extended period Any reply received by the Office later than three earned patent term adjustment. See 37 CFR 1.	THE MAILING DA rovisions of 37 CFR 1.130 this communication. ximum statutory period will for reply will, by statute, a months after the mailing	TE OF THIS COMMUNICATION 6(a). In no event, however, may a reply be tim Il apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	N. the mailing date of this communication. (35 U.S.C. § 133).		
Status					
• • • • • • • • • • • • • • • • • • • •	2b)☐ This andition for allowan	ay 2006. action is non-final. ce except for formal matters, pro x parte Quayle, 1935 C.D. 11, 45			
Disposition of Claims					
4)  Claim(s) <u>1-96</u> is/are pending i 4a) Of the above claim(s) <u>1-52</u> 5)  Claim(s) is/are allowed 6)  Claim(s) <u>53-96</u> is/are rejected 7)  Claim(s) is/are objecte 8)  Claim(s) are subject to  Application Papers	is/are withdrawn  . d to.				
<u> </u>					
	is/are: a)☐ acce ny objection to the d cluding the correction	pted or b) objected to by the E rawing(s) be held in abeyance. See on is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).		
Priority under 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Re  3) Information Disclosure Statement(s) (PTO-Paper No(s)/Mail Date 05/15/2006.		4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa			

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### **DETAILED ACTION**

1. This Office Action is response to Applicants' AMENDMENT filed on 05/15/2006.

- Claims 1-52 have been cancelled.
- 3. Claims 53-96 have been added.

## Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 53 and 91 are rejected under 35 U.S.C. 101 because they are lacking of tangible result and useful result. These claims are using computer to implement the abstract concepts or abstract idea factors such as ranking factors and the result is abstract result. It is not real world result or non-tangible result. Thus, it is a non-practical application.

# Claim Objections

6. Claims 53 and 91 are objected to because of the following informalities: In the line 4, please remove the "and" after the "selected page". In line 14 of claim 91, "factor for that page; and" should replace with 'factor for that page, and".

Appropriate corrections are required.

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### Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- 8. A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 10. Claims 53-96 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patent No.: US 6,112,203 issued to Bharat et at (hereinafter Bharat0 in view of Patent No.: US 6,285,999 B1 issued to Page.

With respect to claim 53, Bharat teaches a computer-implemented method of ranking the relevancy of pages in a collection of pages including linking hypertext pages (a set of documents or web pages to be ranked and scoring each page based on the hub and authority for that page via the result set from using the user query including words or keywords in the search query: col. 4, lines 4-22; also see col. 1, lines 5-25, col. 2, lines 6-16), comprising:

determining an intrinsic ranking factor for a selected page for use of at least one selected word on the selected page (hub rank as intrinsic ranking factor: ranking /scoring hub page by using the content of the page containing the selected words or keywords for calculating the rank value for each hub page: col. 7, lines 41-51 and col. 4, lines 4-22); and

determining an extrinsic ranking factor for the selected page, for each linking page in the collection of pages containing an outbound link to the selected page, for use of the at least one selected word on the linking page (the hug page is a page that point to many other pages, authority pages, which is containing an outbound link to the selected page, hub page: col. 4, lines 4-22, col. 7, lines 41-51 and co. 2, lines 6-16).

Bharat teaches using a search engine to retrieve a collection of web pages of interest to the user sending a search query containing words or keywords. The result set is used for ranking process. The ranking factor includes hub and authority. Bharat does not clearly teach intrinsic, extrinsic factor and combine the intrinsic and extrinsic ranking factors related thereto.

However, Page teaches determining relevance from the intrinsic, and extrinsic factors based on the content documents and relationship between of documents and the combination of the racking factors (col. 2, lines 51-60 and col. 8, lines 42-48).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Bharat with the teachings of Page. One having ordinary skill in the art would have found it motivated to utilize the use of combining the ranking factors as disclosed (Page's col. 8, lines 42-48), into the

system of Bharat for the purpose of being useful for estimating the amount of attention any receives on the web, thereby, being easy for viewing the document based on the link pointing to the document (Page's col. 7, lines 55-64).

With respect to claim 54, Bharat teaches adjusting the intrinsic ranking factor for a page weighting factor related to the selected page (col. 7, lines 40-68 and col. 8, lines 1-8; also col. 6, lines 22-32 and col. 2, lines 6-16).

With respect to claim 55, Bharat teaches adjust the extrinsic ranking factor, for each linking page, for a page weighting factor related to linking page (col. 6, lines 22-32 and col. 7, lines 40-67 and col. 8, lines 1-8).

With respect to claim 56, Bharat teaches adjusting the extrinsic ranking factor, for each linking page, for a link weighting factor related to a quantity of outbound links on that linking page to other pages in the collection of pages (col. 7, lines 40-67 and col. 8, lines 1-8).

With respect to claim 57, Bharat teaches adjusting the extrinsic ranking factor, for each lining page, for a page weighting factor related to that linking page (col. 6, lines 22-32 and col. 7, lines 40-67 and col. 8, lines 1-8).

With respect to claim 58, Bharat teaches adjusting the extrinsic ranking factor, for each linking page, in accordance with a link weighting factor related to a quality of outbound links on that linking page to other pages in the collection of pages (col. 7, lines 40-68 and col. 8, lines 1-8; also col. 6, lines 22-32 and col. 2, lines 6-16).

With respect to claim 59, Bharat teaches adjusting the extrinsic ranking factor, for each linking page, in accordance with a link weighting factor related to a quantity of

outbound links on that linking page to other pages in the collection of pages (col. 7, lines 40-68 and col. 8, lines 1-8; also col. 6, lines 22-32 and col. 2, lines 6-16).

With respect to claim 60, Bharat teaches determining use of the at least one selected word in the outbound link to the selected page on each linking page (col. 4, lines 61-67 and col. 5, lines 1-12).

With respect to claim 61, Bharat teaches determining use of the at least one selected word in the vicinity of the outbound link (col. 4, lines 61-67 and col. 5, lines 1-12; also, see col. 1, lines 65-67 and col. 2, lines 1-16).

With respect to claim 62, Bharat teaches wherein the at least one selected word is related to a query (col. 4, lines 8-22).

With respect to claim 63, Bharat teaches ranking each of a plurality of selected pages for each of a plurality of selected words; forming one or more databases including data related to the rankings of each of the selected pages on which each of the selected words is used; and responding to a query with a result set of pages, each page in the result set ranked in accordance with the rankings of that page for one or more of the plurality of selected words related to the query (col. 4, lines 4-30).

With respect to claim 64, Bharat teaches indexing at least one of said one or more databases in accordance with the plurality of selected words (col. 4, lines 4-22).

With respect to claim 65, Bharat teaches determining the content of each selected page, extracting outbound link from each selected page and deriving the page weighting factor for each selected page (col. 6, lines 50-67 and col. 7, lines 1-38; also see col. 7, lines 60-67 and col. 8, lines 1-8).

With respect to claim 66, Bharat teaches a computer-implemented method of ranking the relevancy of pages as discussed in claim 53.

Bharat teaches using a search engine to retrieve a collection of web pages of interest to the user sending a search query containing words or keywords. The result set is used for ranking process. The ranking factor includes hub and authority. Bharat does not clearly teach using a reservoir of bi-directional links to and from each of the selected pages in order to be able to determine the page weighting factor related for each selected page in accordance with a probability of a user viewing that selected page as a result of viewing pages in a random fashion in the collection.

However, Page teaches probability factor and viewing the document (col. 5, lines 8-67 and col. 6, lines 1-60 and col. 3, lines 8-30, col. 7, lines 55-64).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Bharat with the teachings of Page. One having ordinary skill in the art would have found it motivated to utilize the use of combining the ranking factors as disclosed (Page's col. 8, lines 42-48), into the system of Bharat for the purpose of being useful for estimating the amount of attention any receives on the web, thereby, being easy for viewing the document based on the link pointing to the document (Page's col. 7, lines 55-64).

With respect to claim 67, Bharat teaches determining a frequency of the use of the at least one selected word on the selected page (col. 7, lines 10-40).

With respect to claim 68, Bharat teaches determining a location of the at least one selected word on the selected page (col. 3, lines 65-67 and col. 4, lines 1-3).

With respect to claim 69, Bharat teaches determining use of the at least one selected word on the selected page, compared to use of other words on the selected page (abstract and col. 5, lines 30-67).

With respect to claim 70, Bharat teaches determining location of the at least one selected word on the selected page (col. 3, lines 65-67 and col. 4, lines 1-3).

With respect to claim 71, Bharat teaches determining a manner of usage of the at least one selected word on the selected page compared to other words on the selected page (abstract and col. 5, lines 30-67).

With respect to claim 72, Bharat teaches determining a manner of usage the at least one selected word on the selected page compared to other words on the selected page (abstract and col. 5, lines 30-67).

With respect to claim 73, Bharat teaches determining a size of a paragraph in which the at least one selected word is used in the linking page (col. 7, lines 10-40).

With respect to claim 74, Bharat teaches determining an intrinsic ranking factor for a selected page for use of a plurality of selected words on the selected page; and adjust the intrinsic ranking factor for a proximity between at least two of the plurality of selected words on the selected page (col. 4, lines 4-43).

With respect to claim 75, Bharat teaches adjusting the intrinsic ranking factor for a word order between at least two of the plurality of selected words on the selected page (col. 4, lines 8-22 and col. 5, lines 38-45).

With respect to claim 76, Bharat teaches determining an intrinsic ranking factor for a selected page for use of a plurality of selected words on the selected page and

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adjusting the intrinsic ranking factor for a word order between at least two of the plurality of selected words on the selected page (col. 4, lines 8-22 and col. 7, lines 60-67 and col. 8, lines 1-8).

With respect to claim 77, Bharat teaches determining an extrinsic ranking factor for a selected page for use of a plurality of selected word in the vicinity of the outbound link to the selected page on each linking page (col. 4, lines 8-22 and col. 7, lines 40-65).

With respect to claim 78, Bharat teaches determining an extrinsic ranking factor for a selected page for use of a plurality of selected words on the selected page and adjusting the extrinsic ranking factor for a proximity between at least two of the plurality of selected words on the linking page (col. 4, lines 4-43).

With respect to claim 79, Bharat teaches adjusting the extrinsic ranking factor for a word order between at least two of the plurality of selected words on the linking page (col. 4, lines 8-22 and col. 5, lines 38-45).

With respect to claim 80, Bharat teaches determining an extrinsic ranking factor for a selected page for use of a plurality of selected words on the linking page and adjusting the extrinsic ranking factor for a word order between at least two of the plurality of selected words on the linking page (col. 4, lines 8-22 and col. 7, lines 40-65).

With respect to claim 81, Bharat teaches determining an extrinsic ranking factor for a selected page for use of a plurality of selected word in the vicinity of the outbound link to the selected page on each linking page (col. 4, lines 8-22 and col. 7, lines 40-65).

With respect to claim 82, Bharat teaches ranking the relevancy of the selected page for a plurality of selected words and adjusting the ranking in accordance with

proximity between at least two of the plurality of selected words (col. 4, lines 4-42 and col. 7, lines 40-65).

With respect to claim 83, Bharat teaches adjusting the ranking in accordance with proximity between at least two of the plurality of selected words (abstract and col. 5, lines 30-56).

With respect to claim 84, Bharat teaches ranking the relevancy of the selected page for a plurality of selected words and adjusting the ranking in accordance with proximity between at least two of the plurality of selected words (col. 4, lines 4-42 and col. 7, lines 40-65).

With respect to claim 85, Bharat teaches determining a frequency of the use of a plurality of selected words on the selected page and adjusting the intrinsic ranking factor in accordance with proximity between at least two of the plurality of selected words (col. 4, lines 4-42 and col. 7, lines 40-65).

With respect to claim 86, Bharat teaches determining a frequency of the use of a plurality of selected words on the selected page and adjusting the intrinsic ranking factor in accordance with proximity between at least two of the plurality of selected words (col. 4, lines 4-42 and col. 7, lines 40-65).

With respect to claim 87, Bharat teaches determining a frequency of the use of a plurality of selected words on the selected page and adjusting the intrinsic ranking factor in accordance with proximity between at least two of the plurality of selected words (col. 4, lines 4-42 and col. 7, lines 40-65).

With respect to claim 88, Bharat teaches determining a location of the use of a plurality of selected words on the selected page (col. 5, lines 30-56).

With respect to claim 89, Bharat teaches determining the use of a plurality of selected words on the selected page, compared to use of other word on the selected page and adjusting the intrinsic ranking factor in accordance with proximity between at least two of the plurality of selected words (col. 4, lines 4-42 and col. 7, lines 40-65).

With respect to claim 90, Bharat teaches determining the use of a plurality of selected words on the selected page, compared to use of other word on the selected page and adjusting the intrinsic ranking factor in accordance with proximity between at least two of the plurality of selected words (col. 4, lines 4-42 and col. 7, lines 40-65).

With respect to claim 91, Bharat teaches a computer implemented method of ranking the relevancy of pages in a collection of pages including hypertext linking pages (a set of documents or web pages to be ranked and scoring each page based on the hub and authority for that page via the result set from using the user query including words or keywords in the search query: col. 4, lines 4-22; also see col. 1, lines 5-25, col. 2, lines 6-16), comprising:

for each page of a collection of pages including hypertext linking pages,
determining a page weighting factor; a content score for the use of each one of a
plurality of selected words on said each page, and for each of the plurality of selected
words, related to the use of one or more of the plurality of selected words in association
with an outbound link on said each page to another page in the collection; and each
page to another page in the collection and for each of the plurality of selected words;

ranking a relevancy of each page in accordance with the content score for that page adjusted in accordance with the page weighting factor for that page; and each linking page having an outbound link to that page adjusted in accordance with a page weighting factor for that linking page (col. 2, lines 6-36 and col. 4, lines 4-45 and lines 61-67 and col. 5, lines 1-12 and col. 5, lines 30-60; also see col. 7, lines 10-50).

Bharat teaches using a search engine to retrieve a collection of web pages of interest to the user sending a search query containing words or keywords. The result set is used for ranking process. The ranking factor includes hub and authority. Bharat does not clearly teach a probability of a user viewing said each page as a result of viewing page, an anchor text content score for each linking page

However, Page teaches probability factor and viewing the document (col. 5, lines 8-67 and col. 6, lines 1-60 and col. 3, lines 8-30, col. 7, lines 55-64) and anchor text (abstract, col. 2, lines 5-9, col. 3, lines 21-27 and col. 8, lines 57-63).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Bharat with the teachings of Page. One having ordinary skill in the art would have found it motivated to utilize the use of combining the ranking factors as disclosed (Page's col. 8, lines 42-48), into the system of Bharat for the purpose of being useful for estimating the amount of attention any receives on the web, thereby, being easy for viewing the document based on the link pointing to the document (Page's col. 7, lines 55-64).

With respect to claim 92, Bharat teaches a computer-implemented method of ranking the relevancy of pages as discussed in claim 91.

Bharat teaches using a search engine to retrieve a collection of web pages of interest to the user sending a search query containing words or keywords. The result set is used for ranking process. The ranking factor includes hub and authority. Bharat does not clearly teach anchor text score for each linking page.

However, Page teaches anchor text (abstract, col. 2, lines 5-9, col. 3, lines 21-27 and col. 8, lines 57-63).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Bharat with the teachings of Page. One having ordinary skill in the art would have found it motivated to utilize the use of combining the ranking factors as disclosed (Page's col. 8, lines 42-48), into the system of Bharat for the purpose of being useful for estimating the amount of attention any receives on the web, thereby, being easy for viewing the document based on the link pointing to the document (Page's col. 7, lines 55-64).

With respect to claim 93, Bharat teaches forming one or more databases of the relevance rankings for the use of each of the plurality of selected words on each of the pages of the collection and searching the one or more databases to respond to a query with a result set of pages ranked for use of one or more the selected words (col. 4, lines 8-30).

With respect to claim 94, Bharat teaches forming one or more databases of the relevance rankings for the use of each of the plurality of selected words on each of the pages of the collection and searching the one or more databases to respond to a query

with a result set of pages ranked for use of one or more the selected words (abstract, col. 2, lines 6-36).

With respect to claim 95, Bharat teaches adjusting the ranking in accordance with a proximity between the at least two of the plurality of words (col. 4, lines 4-43).

With respect to claim 96, Bharat teaches adjusting the ranking in accordance with a proximity between the at least two of the plurality of words (col. 4, lines 4-43).

#### Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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### **Contact Information**

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh Ly whose telephone number is (571) 272-4039 or via E-Mail: ANH.LY@USPTO.GOV (Written Authorization being given by Applicant (MPEP 502.03 [R-2])) or fax to (571) 273-4039 (Examiner's personal Fax No.). The examiner can normally be reached on TUESDAY – THURSDAY from 8:30 AM – 3:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene, can be reached on (571) 272-4107 or Primary Examiner: Jean Corrielus (571) 272-4032.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). Any response to this action should be mailed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231, or faxed to:

Central Fax Center: (571) 273-8300

ANH LY/2 AUG. 10<sup>th</sup>, 2006